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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/926,225	12/28/2001	Steffen Setzer	7170	2162
7590	11/02/2004			
Shlesinger Arkwright & Garvey			EXAMINER	
3000 South Eads Street			BHATNAGAR, ANAND P	
Arlington, VA 22202			ART UNIT	PAPER NUMBER
			2623	

DATE MAILED: 11/02/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/926,225

Applicant(s)

SETZER ET AL.

Examiner

Anand Bhatnagar

Art Unit

2623

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-5 is/are rejected.
- 7) ☒ Claim(s) 6-10 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 27 March 2000 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 12/28/01.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Miramonti et al. (U.S. patent 6,288,385 B1).

Regarding claim 1: Miraminti et al. discloses a device for pictorially depicting three-dimensional object with a plurality of cameras which are arranged distributed in defined spatial arrangement about an object which is to be depicted (fig. 1D and col. 6 lines 33-35, wherein a number of detectors are surrounding the object, the detectors are cameras), and a storage and reproduction apparatus, wherein recording of the object which is to be depicted takes place from a plurality of recording devices of the plurality of cameras relative to the object (fig. 2 elements 214 and 216, wherein the storage of the two dimensional images takes place), storage of two-dimensional image data of each recording apparatus takes place in the storage apparatus together with associated coordinates of the at least one camera with regard to the object which is to be depicted (col. 2 lines 57-61, wherein the coordinates of the patches on the object are determined in order to determine the axis of rotation), and reproduction takes place of the stored image data in perspective elevation by generation of a

three-dimensional impression by joining the two-dimensional image data with consideration for the associated coordinates (col. 2 lines 62-67 and col. 3 lines 1-4, wherein the 3D image is generated from the obtained 2D images and coordinates).

Miramonti et al. discloses several embodiments wherein multiple 2D images of the objects are acquired of an object and a 3D image generated from the acquired 2D images. One embodiment is a single still camera wherein the object rotates on a rotating apparatus (fig. 1B), another embodiment wherein the single camera rotates around a non-rotating object (fig. 1C), and lastly an embodiment wherein multiple cameras are positioned around a non-rotating object (fig. 1D). It would have been obvious to one skilled in the art to modify the system wherein multiple cameras are obtaining 2D images from different angles while the object is rotating, simultaneously, by a rotation apparatus.

Regarding claim 2: A device according wherein the cameras are arranged on a cylindrical or partially spherical surface surrounding is to be depicted (fig 1D, wherein the cameras are positioned circularly/partial spherical surface since they are in a single plane).

Regarding claim 3: A device wherein means for alteration of the relative position of the plurality of cameras with regard to the object which is to be depicted and means for detecting the relative coordinates between the at least one camera and the object which is to be depicted are provided (col. 2 lines 57-67, wherein the coordinates are determined).

Regarding claim 4: A device wherein the plurality of cameras are arranged distributed about the object in a plane extending through the object which is to be depicted (fig. 1D wherein the cameras are in a specific plane which is the plane of the desired object depiction).

Regarding claim 5: A device wherein the plurality of cameras are disposed along a substantially C-shaped or partially-circular rail (fig. 1D wherein the cameras are disposed in a circular path).

Miramonti et al. discloses to have the multiple detectors/cameras arranged in a circular/partial spherical path in order to image an object. Miramonti et al. does not teach to have the cameras in a partial circular path. It would have been obvious to one skilled in the art to modify the system wherein different camera paths, such as a partial circular path, may be applied to the system, especially if the object is rotating, in order to cut down the number of cameras/detectors needed to reduce the expense of the system.

Allowable Subject Matter

2. Claims 6-10 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

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Conclusion

3. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Miller et al. (U.S. patent 5,999,641) for a an system of three dimensional image manipulation.

Contact Information

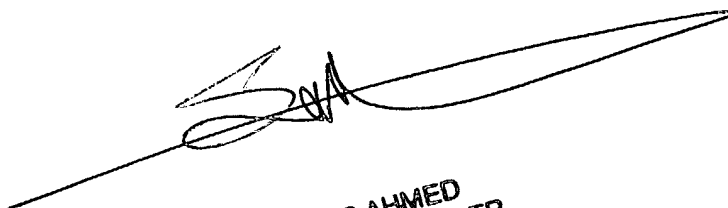
4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Anand Bhatnagar whose telephone number is (703) 306-5914, whose supervisor is Amelia Au whose number is 703-308-6604, group fax is 703-872-9306, and Tech center 2600 customer service office number is 703-306-0377.

AB

Anand Bhatnagar

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October 31, 2004



SAMIR AHMED
PRIMARY EXAMINER